

SECTION 2

Permits and Agency Summaries

Summary of Permitting Approach

The full extent of application requirements cannot be determined until the final project design is selected and the project area is solidified. Once the project area is known, a review of potential regulatory jurisdictional areas will be conducted to determine if the project area contains federal Waters of the United States (under the purview of the U.S. Army Corps of Engineers and Regional Water Quality Control Board [RWQCB]), Waters of the State (under the purview of the RWQCB and California Department of Fish and Game [CDFG]), riparian areas (under purview of CDFG), and/or areas subject to the Coastal Act (under the purview of the California Coastal Commission [CCC] and City of San Francisco Local Coastal Plan). If it is determined that one or more of these jurisdictions are not present within the project area, some permits described below would not be required.

Receiving authorization from these agencies will require the permit applications, surveys and studies. Separate applications would need to be submitted to the RWQCB for 401 Water Quality Certification, to CDFG for a 1602 Lake Streambed Alteration Agreement (SAA), and to the City of San Francisco for a Coast Development Permit, concurrent with preparation and submittal of the Corps application. Early coordination with the resource agencies is recommended through either (a) the regularly scheduled pre-application meetings that occur monthly at the Corps' offices in San Francisco; or (b) a separate, project-specific meeting outside of the regular Corps meeting schedule.

The following section summarizes the federal, state and regional agencies potentially affected by this project and their regulatory requirements as they relate to the Vista Grande Drainage Basin Tunnel Analysis Project (the Project). The summaries include a brief discussion of the agency as well as the purpose of each requirement as it relates to the project and a brief synopsis of each agency's permitting review and approval process.

California Environmental Quality Act

I. Regulatory Authority

The goal of the California Environmental Quality Act (CEQA) (Pub. Res. Code §21000 *et seq.*) is to develop and maintain a high-quality environment now and in the future, while the specific goals of CEQA are for California's public agencies to: (1) identify the significant environmental

effects of their actions; and, either (2) avoid those significant environmental effects, where feasible; or (3) mitigate those significant environmental effects, where feasible. All public agencies are required to comply with CEQA. For projects where there are multiple agencies involved, CEQA requires that a lead agency be selected.

CEQA applies to “projects” proposed to be undertaken or requiring approval by State and local government agencies. “Projects” are activities which have the potential to have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits and the approval of tentative subdivision maps.

II. Permitting Requirements

The most basic steps of the environmental review process are to: determine if the activity is a “project” subject to CEQA; determine if the “project” is exempt from CEQA; and perform an Initial Study to identify the environmental impacts of the project and determine whether the identified impacts are “significant”. Based on its findings of “significance,” the lead agency prepares one of the following environmental review documents: (a) Negative Declaration if it finds no “significant” impacts; (b) Mitigated Negative Declaration if it finds “significant” impacts but revises the project to avoid or mitigate those significant impacts; or (c) Environmental Impact Report (EIR) if it finds “significant” impacts.

III. Agency Consultation

Preliminary discussions with resource agencies on this point indicate that an EIR would be required under CEQA and that the City of Daly City would serve as the lead agency under CEQA (see Appendix A for meeting minutes).

IV. Timing and Sequence

A CEQA document would need to be prepared jointly with a NEPA document in advance of all other permits and would require approximately 1-2 years for completion.

V. Permit Checklist for joint NEPA/CEQA filing

- Review for exemptions/exclusions
- Initial Study/Environmental Assessment
- EIS/EIR
 - Notice of Preparation/Intent
 - Scoping
 - Draft EIS/EIR
 - Public and Agency Review
 - State Clearinghouse/EPA filing: Federal Register
 - Final EIS/EIR
 - Review of Response by commenting agencies
 - Agency Decision
 - Findings/Record of Decision

National Environmental Policy Act

I. Regulatory Authority

The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. Compliance with NEPA is required for a project that includes a federal permit or entitlement; federal funding; or on a project that a federal agency will undertake.

Long-term projects constructed on National Park Service (NPS) land, such as the permanent installation of the tunnel, require a right-of-way permit. NPS issues **right-of-way agreements** for utilities to pass over, under or through NPS property. According to the NPS Management Policies a right-of-way may be issued “only if there is no practicable alternative to such use of NPS lands.” See further discussion of this permit under the Golden Gate National Recreation Area. Since NPS is a Federal Agency, it is required to comply with NEPA.

II. Permitting Requirements

The NEPA process consists of an evaluation of the environmental effects of a federal undertaking including its alternatives. There are three levels of analysis depending on whether or not an undertaking could significantly affect the environment. These three levels include: categorical exclusion determination; preparation of an environmental assessment/finding of no significant impact (EA/FONSI); and preparation of an environmental impact statement (EIS).

At the first level, an undertaking may be categorically excluded from a detailed environmental analysis if it meets certain criteria which a federal agency has previously determined as having no significant environmental impact. A number of agencies have developed lists of actions which are normally categorically excluded from environmental evaluation under their NEPA regulations.

At the second level of analysis, a federal agency prepares a written environmental assessment (EA) to determine whether or not a federal undertaking would significantly affect the environment. If the answer is no, the agency issues a finding of no significant impact (FONSI). The FONSI may address measures which an agency will take to reduce (mitigate) potentially significant impacts.

If the EA determines that the environmental consequences of a proposed federal undertaking may be significant, an EIS is prepared. An EIS is a more detailed evaluation of the proposed action and alternatives. The public, other federal agencies and outside parties may provide input into the preparation of an EIS and then comment on the draft EIS when it is completed.

If a federal agency anticipates that an undertaking may significantly impact the environment, or if a project is environmentally controversial, a federal agency may choose to prepare an EIS without having to first prepare an EA.

After a final EIS is prepared and at the time of its decision, a federal agency will prepare a public record of its decision addressing how the findings of the EIS, including consideration of alternatives, were incorporated into the agency's decision-making process.

III. Agency Consultation

Preliminary discussions with resource agencies indicate that the project would require an EIS to be prepared for compliance with NEPA. A lead federal agency for NEPA has not been determined, but the National Park Service/GGNRA is a likely candidate (see Appendix A for meeting minutes).

IV. Timing and Sequence

- NEPA and CEQA documents would be prepared jointly.
- NEPA/CEQA documents will be prepared in advance of all other permits and will require approximately 1-2 years for completion.

V. Permit Checklist for Joint NEPA/CEQA filing

- Review for exemptions/exclusions
- Initial Study/Environmental Assessment
- EIS/EIR
 - Notice of Preparation/Intent
 - Scoping
 - Draft EIS/EIR
 - Public and Agency Review
 - State Clearinghouse/EPA filing: Federal Register
 - Final EIS/EIR
 - Review of Response by commenting agencies
 - Agency Decision
 - Findings/Record of Decision

Golden Gate National Recreation Area

I. Regulatory Authority

The Golden Gate National Recreation Area (GGNRA), a unit of the National Park Service (NPS), extends from Tomales Bay in Marin County along the shore all the way to San Mateo County encompassing 59 miles of bay and ocean shoreline and covers 75,398 acres of land and water. The tunnel outlet structure and the proposed tunnel alignments are located on or beneath GGNRA land at Fort Funston. Consultation with representatives from GGNRA/NPS indicated that their primary concerns include potential impacts to water quality, visual and aesthetic resources, and beach access. In addition they are concerned about the temporary impacts to the park as a result of construction activities. Approval of this type of project by the NPS may be challenging. The

project may require approval of a **permanent easement** for the tunnel components and **temporary access for construction purposes**. Both of these actions fall under the category of “**Special Park Uses**” which are described in the NPS Management Policies and in Director’s Order #53: Special Park Uses (NPS, 2000; NPS, 2001). Construction activities would require a Special Use Permit. According to Director’s Order #53, a Special Use Permit can only be issued if the proposed activity will not:

- Cause injury or damage to park resources.
- Be contrary to the purposes for which the park was established.
- Unreasonably impair the atmosphere of peace and tranquility maintained in wilderness, natural, historic or commemorative locations within the park.
- Unreasonably interfere with the interpretive, visitor service, or other program activities, or with the administrative activities of the NPS.
- Substantially impair the operation of public facilities or services of NPS concessioners or contractors.
- Present a clear and present danger to public health and safety.
- Result in significant conflict with other existing uses.

A Special Use Permit can be issued for a period up to, but no longer than, five years. For longer-term projects, such as the permanent installation of the tunnel, a right-of-way permit must be obtained. NPS issues **right-of-way agreements** for utilities to pass over, under or through NPS property. According to the NPS Management Policies a right-of-way may be issued “only if there is no practicable alternative to such use of NPS lands.” It is considered a temporary agreement and does not transfer any interest in the land itself. The fees associated with this type of agreement may be high and the NPS pays special attention to recovering the fair market value for the use of their land. Since NPS is a Federal Agency, it is required to comply with the National Environmental Policy Act (NEPA). Thus, the appropriate NEPA documentation would be required to obtain these permits.

The Project must comply with the following NPS Policies:

- Comply with State Lands Commission lease requirements
- Utilities should be sited outside park boundaries whenever possible
- Natural shoreline processes will be allowed to continue without interference and new developments will not be placed in areas subject to these processes.

II. GGNRA Permitting Requirements

The National Park Service (NPS) is authorized by 16 U.S.C. §79 to permit the construction of certain public utilities, including flumes, tunnels, and other water conduits (including sewer), across Golden Gate National Recreation Area (GGNRA) lands in accordance with NPS

regulations. NPS regulations at 36 C.F.R. §5.7 implement this authority by prohibiting the construction of utilities and other structures in park areas except in accordance with the provisions of a valid permit or agreement. The type of NPS permit required for the proposed project will depend on whether the proposed storm water tunnel and beach outfall on GGNRA lands are consistent with the terms of the municipal easement for the existing Vista Grande storm water outfall (Easement).

If these components of the proposed project are consistent with Daly City's Easement, project implementation would be regulated pursuant to a NPS Special Use Permit (SUP) (Form 10-114) and Director's Order 53 (See, 36 C.F.R. §5). An SUP application is required regardless of whether the City is seeking to renew or amend an existing authorization, or request a new authorization.

The following permits may be required from the GGNRA:

- **NEPA:** required for environmental review and prior to issuance of any of the GGNRA permits (see NEPA discussion earlier in this workbook)
- **Special Use Permit:** required for permanent easement for the tunnel components and temporary access for construction purposes.
- **Right-of-Way Permit:** required for utilities that that pass over, under or through NPS property.
- **State Lands Commission Lease Compliance:** see State Lands Commission section.

III. Agency Consultation

Daly City met with GGNRA staff on September 12, 2007 to describe the Project and inquire about permitting requirements. The Project was also presented at a GGNRA Project Review Committee meeting on May 28, 2008—prior to development of the Lake Merced alternative.

IV. Timing and Sequence

- NEPA/CEQA documentation to be completed prior to Special Use Permit; Right-of-Way; and State Lands Commission lease compliance.
- 180 days processing time: 30 days to determine permit completion; 2-4 months for agency review of application for CEQA compliance

V. Permit Checklist

See State Lands Commission Section below.

U.S. Army Corps of Engineers

I. Regulatory Authority

Federal interest in water resources development is established by law. Wetlands and other waters, e.g., rivers, streams and natural ponds, are a subset of “waters of the U.S.” and receive protection under Section 404 of the Clean Water Act (CWA). The U.S. Army Corps of Engineers (USACE) has primary Federal responsibility for administering regulations that concern waters of the U.S. In this regard, USACE acts under two statutory authorities, the Rivers and Harbors Act (RHA) (Sections 9 and 10), which governs specified activities in “navigable waters,” and the Clean Water Act (Section 404), which governs specified activities in “waters of the United States,” including wetlands.

Section 404 of the CWA regulates discharge of fill material into “waters of the United States” which include wetlands. Although the EPA is the responsible agency for implementing the Clean Water Act, the USACE is responsible for authorizing (permitting) a project that proposes filling of wetlands or other waters of the U.S. under Section 404 of the Act.

II. Permitting Requirements

It is likely that any project with impacts to Lake Merced will result in a larger impact area to special status habitats, and therefore will require the preparation of a more comprehensive permit application package. An initial review of other proposed project alternatives suggests that these alternatives will have fewer impacts and will potentially qualify for expedited permit programs such as the Corps Nationwide Permit Program. Where appropriate, two options for permitting have been described to cover the range of potential work required for regulatory authorization. “Option 1” is used to detail the work necessary for a project that would impact Lake Merced. “Option 2” refers to all other potential project alternatives that do not impact Lake Merced. If Lake Merced is found to be exclusively a Waters of the State, no Corps permits will be required and Option 1 would not be applicable to this project.

Clean Water Act Section 404

Option 1 – Army Corps of Engineers Permit under Section 404 of CWA and Section 10 of the RHA

1. Individual Permit

A Section 404 Permit Application to Corps for an Individual Permit (IP) would need to include details on project activities including construction methods and timing, areas of potential impact and estimation of potential jurisdictional impacts (including wetlands), and impacts to federally-protected biological and cultural resources as necessary. The application would also include the necessary figures and maps as required by the Corps (project design drawings, vicinity, location, USGS, project impact map, etc.). The RWQCB, CDFG, CCC, USFWS and/or NMFS require copies of this application.

2. Alternatives' Analysis

As part of the review process for an IP under CWA, the Corps is required to determine whether a project complies with Section 404(b)(1) Guidelines. These Guidelines prohibit the discharge of dredged or fill material to waters of the U.S. if there is a “practicable alternative to the proposed discharge” that would have less adverse impact on aquatic ecosystems, so long as the alternative does not have other significant adverse environmental consequences. An alternative is considered practicable if it is capable of being done considering costs, technology, and logistics in light of overall project purpose.

Before the Corps can issue the IP, the Least Environmentally Damaging Practicable Alternative (LEDPA) will need to be identified. Using the alternatives for other project designs developed by the City, and in compliance with the 404(b)(1) guidelines, 404(b)(1) Alternative Analysis (AA) would be prepared. To the greatest extent possible, this analysis will use existing information developed during the environmental phase (CEQA/NEPA documentation) and incorporate the guidelines under 404(b)(1) (40 CFR 230(a)). Upon finalization of the document, the AA would be submitted to the Corps. This document can be submitted at the time of the IP application, or within 60 days of the IP application’s submittal. This document will likely also be required by the RWQCB prior to their permit issuance.

3. Mitigation and Monitoring Plan

A wetland mitigation and monitoring plan (MMP) would be prepared according to U.S. Army Corps of Engineers San Francisco District guidelines. This plan would summarize the impacts to jurisdictional wetlands and special status species habitat, and will outline the actions necessary to restore, enhance or create wetlands and habitat features of equal or better functions and values. Preparation of the plan will be centered on mitigating on-site if possible and coordinated with the proposed design features of adjacent to Lake Merced. The conceptual plan also would be prepared in coordination with permit applications and conservation measures for any target species (such as RLF) to ensure that it is responsive to the full suite of biological mitigation requirements of the proposed project.

The plan would provide text and graphical depictions of the methods to be used for creation or enhancement of habitat features, including grading and contouring, installation of plant materials, plant protection, irrigation systems, maintenance actions and schedule, performance standards, monitoring, and reporting requirements.

As is typical of projects with impacts requiring an IP, a conceptual MMP would be submitted for Corps and other applicable agency review prior to finalization. Once all agencies agree upon the proposed mitigation concept, a final plan would be prepared and submitted to the agencies.

Option 2 – Army Corps of Engineers Permit under Section 404 of CWA

1. Nationwide Permit

A Section 404 Nationwide Permit Application (also called Pre-Construction Notification) would be prepared and submitted to the Corps for a specified Nationwide Permit (NWP) or “stacked”

Nationwide Permits. The application would include details on project activities including construction methods and timing, areas of potential impact and estimation of potential wetland impacts, and impacts to biological resources. The application would also describe the conceptual mitigation proposal for project impacts (as approved by the City). The application would also include the necessary figures and maps as required by the Corps (project design drawings, vicinity, location, USGS, project impact map, etc.) The RWQCB, CDFG, CCC, USFWS and/or NMFS require copies of this application.

2. Mitigation and Monitoring Plan

Based upon the proposed mitigation in the NWP application and any subsequent changes, a final wetland mitigation and monitoring plan (MMP) would be prepared according to U.S. Army Corps of Engineers San Francisco District guidelines. This plan would summarize the impacts to jurisdictional wetlands and special status species habitat, and will outline the actions necessary to restore, enhance or create wetlands and habitat features of equal or better functions and values. Preparation of the plan would be centered on mitigating on-site if possible or at a City-approved location. The plan also would be prepared in coordination with permit applications and conservation measures for any target species (such as RLF) to ensure that it is responsive to the full suite of biological mitigation requirements of the proposed project.

The plan would provide text and graphical depictions of the methods to be used for creation or enhancement of habitat features, including grading and contouring, installation of plant materials, plant protection, irrigation systems, maintenance actions and schedule, performance standards, monitoring, and reporting requirements.

Nationwide Permit

A nationwide permit (NWP) is a form of general permit that authorizes a category of activities throughout the nation. If the outfall is constructed below the high tide line and the outfall is being made larger to accommodate higher capacity flows, a nationwide permit may be required; if the outfall is below the high tide line but will occupy the same footprint, then a non-reporting maintenance nationwide permit may be required¹. If the buried pipeline connecting the outfall and the submarine pipeline will be excavated seaward of the outfall (i.e., under that beach), a Nationwide Permit 7 plus Nationwide Permit 12 for utility lines may be required. Construction activities below the high tide line may also require authorization under Nationwide Permit 33 for temporary construction, access and dewatering.

¹ Projects that potentially qualify for a non-reporting NWP must also be in compliance with the general terms and conditions of the NWP program. Among other things, these conditions prohibit any “take” of federally protected species under the Endangered Species Act without authorization from the USFWS and/or NMFS, prohibit impacts to cultural resources without a consultation under Section 106 of the National Historic Preservation Act, require a Section 401 permit from the RWQCB, and also require Coastal Zone Management Act (CZMA) federal consistency determination from the CCC. Many of these issues cannot be resolved without assistance from the a federal agency (usually the Corps) and therefore negate the project’s ability to utilize the NWP without preparation of a PCN and reporting the activity to the Corps.

Nationwide Permit 7 – Outfall Structures and Associated Intake Structures

NWP7 covers activities related to the construction or modification of outfall structures and associated intake structures, where the effluent from the outfall is authorized, conditionally authorized, or specifically exempted by, or that are otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System (NPDES) Program (Section 402 of the Clean Water Act). The construction of intake structures is not authorized by this NWP, unless they are directly associated with an authorized outfall structure. This permit also authorizes modification of these structures

Nationwide Permit 12 – Utility Line Activities

NWP12 covers activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2 acre of waters of the United States. Area must be restored to pre-construction contours.

Nationwide Permit 33 – Temporary Construction, Access and Dewatering

NWP33 covers temporary structures, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard. This NWP also authorizes temporary structures, work, and discharges, including cofferdams, necessary for construction activities not otherwise subject to the Corps or U.S. Coast Guard permit requirements. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if the district engineer determines that it will not cause more than minimal adverse effects on aquatic resources. Following completion of construction, temporary fill must be entirely removed to upland areas, dredged material must be returned to its original location, and the affected areas must be restored to pre-construction elevations. The affected areas must also be revegetated, as appropriate. This permit does not authorize the use of cofferdams to dewater wetlands or other aquatic areas to change their use. Structures left in place after construction is completed require a section 10 permit if located in navigable waters of the United States.

III. Agency Consultation

A discussion with Mark D'Avignon with the Corps in San Francisco confirmed that if there is no fill placed below the high water line at the outfall then this part of the project is not in the Corps' jurisdiction. If fill is placed below the high water line, then it is in the Corps jurisdiction. The nationwide permit 7 may also be required for the outfall. Consultation occurred prior to development of the Lake Merced alternative.

IV. Timing and Sequence

- NEPA/CEQA documentation to be completed prior to USACE permits.
- Nationwide Permits require 3 months to 1 Year

V. Permit Checklist

Section 404 Requirements

- Waters of the U.S. Delineation Report
- Attendance at a pre-application interagency meeting with USACE, USFWS, USEPA, NMFS, RWQCB and CDFG is recommended for a project that impacts Lake Merced (submit required information 2 weeks prior to each agency)
- Submit complete IP application or PCN to USACE
- Prepare 404(b)(1) Alternatives Analysis identifying Least Environmentally Damaging Practicable Alternative (LEDPA)
- The Corps will publish a Public Notice for Individual Permit which requires the applicant to respond to any comments received.
- Mitigation and Monitoring Plan
- Documentation of compliance with the Endangered Species Act, or participation in a Section 7 consultation between the Corps and USFWS/NMFS
- RWQCB 401 Certification must be obtained before Corps can issue a permit.
- CZMA federal consistency determination
- Section 106 National Historic Preservation Act compliance
- The Corps will prepare internal NEPA report (Environmental Assessment) documenting a “finding of no significant impact” (FONSI) prior to issuing an IP

U.S. Fish and Wildlife Service (Section 7 of Endangered Species Act)

I. Regulatory Authority

Section 7 of the federal Endangered Species Act (FESA) of 1973 as amended requires federal agencies, in consultation with U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS), to ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in destruction or adverse modification of the critical habitat of these species (16 USC 1536, 40 CFR part 402). It has not yet been determined if there are endangered or threatened species within the Vista Grande project area because the area of impact needs to be defined. In accordance with NEPA requirements for FESA compliance, consultation with USFWS and/or NMFS will occur. If formal consultation is required, a Biological Assessment will need to be prepared.

Although the full extent of species within the project area is not known without conducting field investigations, federally-protected species are known to potentially occur within the area. Terrestrial species include the western snowy plover (plover) and California red-legged frog (CRLF). As part of the 404 permit application and for consultation with USFWS, a biological assessment (BA) for the USFWS would need to be prepared that describes the impacted species, the project activities and the potential for these activities to result in take of a federally-listed species or its designated habitat. To determine the likelihood of presence of plover and CRLF (or other federal special-status animals and federal special-status plants as determined during the NEPA/CEQA process), biologists would need to conduct habitat assessments focusing on the specific biological conditions required for federal species identified in the EIR/EIS as potentially occurring within the project boundary. The focused habitat assessments would inventory the biological conditions within the project boundary including vegetation and habitat present, and species observed (if any).

II. Permitting Requirements

The BA would provide the basis for Section 7 consultation and would include the following:

- Summary of Findings and Conclusions
- Project Description
- Description of Listed Species
- Environmental Setting
- Identification of project Action Area
- Potential for “take” of species and or its habitat
- Conservation measures to reduce and avoid potential for “take”
- References
- Habitat suitability report(s) will be included as appendices

The USFWS may also require formal consultation under Section 7 of the federal Endangered Species Act.

III. Agency Consultation

No consultation has take place at this point.

IV. Timing and Sequence

- Formal Consultation: 6 months to 1 year
- Programmatic Biological Opinion: 6 months

V. Permit Checklist

- Prepare Biological Assessment and submit to Corps or NPS for Consultation with USFWS.
- Respond to comments from USFWS (if applicable).
- USFWS issues Biological Opinion (BO) and Incidental Take Statement (ITS) to the Corps or NPS.

National Oceanic and Atmospheric Administration National Marine Fisheries Service (Section 7 of Endangered Species Act)

I. Regulatory Authority

As previously mentioned, Section 7 of FESA requires federal agencies, in consultation with U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS), to ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in destruction or adverse modification of the critical habitat of these species (16 USC 1536, 40 CFR part 402).

Furthermore, the Magnuson-Stevens Act, as amended, requires federal agencies to consult with NMFS when any activity proposed to be permitted, funded, or undertaken by a federal agency may have adverse impacts on designated essential fish habitat (EFH). EFH is defined as "...those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The regulations further clarify EFH by defining "waters" to include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; "substrate" to include sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" to mean the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" to cover a species' full life cycle. EFH consultations can be accomplished within a consultation under the Endangered Species Act.

Although the full extent of species within the project area is not known without conducting field investigations, federally-protected species are known to potentially occur within the area. The following federally-protected species under purview of NMFS are known to potentially occur within the area:

- *Arctocephalus townsendi* Guadalupe fur seal (T)
- *Balaenoptera borealis* sei whale (E)
- *Balaenoptera musculus* blue whale (E)
- *Balaenoptera physalus* finback whale (E)
- *Eubalaena glacialis* right whale (E)
- *Eumetopias jubatus* Steller sea-lion (T)
- *Physeter catodon* sperm whale (E)
- *Caretta caretta* loggerhead turtle (T)
- *Chelonia mydas* green turtle (T)
- *Dermochelys coriacea* leatherback turtle (E)
- *Lepidochelys olivacea* ridley sea turtle (T)
- *Acipenser medirostris* green sturgeon (T)

- *Oncorhynchus kisutch* coho salmon - central CA coast (E)
- *Oncorhynchus mykiss* Central California Coastal steelhead (T) and Central Valley steelhead (T)
- *Oncorhynchus tshawytscha* Central Valley spring-run chinook salmon (T) and winter-run chinook salmon, Sacramento River (E)

Additionally, the portion of the proposed project within the Pacific Ocean may impact federally protected EFH for Pacific Coast Groundfish, Coastal Pelagic Species, and West Coast Salmon.

II. Permitting Requirements

The BA would provide the basis for Section 7 and EFH consultations and would include the following:

- Summary of Findings and Conclusions
- Project Description/Description of the Proposed Action
- Description of Listed Species and EFH
- Environmental Setting
- Identification of project Action Area
- Potential for “take” of species and or its habitat
- Potential for effects (including cumulative effects) on EFH
- Conservation measures to reduce and avoid potential for “take”
- Proposed minimization and mitigation measures to reduce effects on EFH
- References
- Habitat suitability report(s) will be included as appendices

III. Agency Consultation

No consultation has take place at this point.

IV. Timing and Sequence

- Formal Consultation: 6 months to 1 year
- Programmatic Biological Opinion: 6 months

V. Permit Checklist

- Prepare Biological Assessment and submit to Corps or NPS for Consultation with NMFS
- Respond to comments from NMFS (if applicable)
- NMFS issues Biological Opinion (BO) with Incidental Take Statement (ITS), and EFH Conservation Recommendations to the Corps or NPS

State Historic Preservation Office

I. Regulatory Authority

The National Historic Preservation Act (NHPA) of 1966 (Public Law 89-665, as amended) and the National Environmental Policy Act of 1969 (Public Law 91-190) define the responsibilities of the federal government regarding preservation of cultural resources. The mandate to preserve cultural resources applies to both public and private lands.

II. Permitting Requirements

Section 106

Section 106 of the NHPA and the NHPA regulations contained in 36 CFR Part 800 require federal agencies for any federally-funded projects to consider the impacts on properties included in or potentially eligible for the National Register of Historic Places (NRHP). According to Sections 106 and 110 of the NHPA, it is necessary to evaluate all cultural resources within an Area of Potential Effects (APE) to assess their National Register eligibility. This evaluation process involves:

- identifying all National Register-listed properties that might be affected by the proposed activity, as well as those that appear to meet eligibility criteria;
- evaluating the potential eligibility of each property for inclusion in the NRHP, using 36 CFR 60.4. (Determinations of eligibility are based on a consultation process involving the lead federal agency, SHPO, and the Keeper of the National Register of Historic Places);
- determining whether the proposed activity will affect historic properties that have been found to meet National Register criteria, defined in consultation with the SHPO; and
- finding acceptable ways to reduce the harm (avoid or mitigate the adverse effect) to historic properties, in consultation with the SHPO.

Part 60.4 of Chapter I of Title 36 of the Code of Federal Regulations outlines the criteria for evaluating properties for possible inclusion in the NRHP as follows:

The quality of significance in American history, architecture, archeology and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

- a. are associated with events that have made a significant contribution to the broad patterns of history;
- b. are associated with the lives of persons significant in the past;
- c. embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d. have yielded, or may be likely to yield, information important in prehistory or history.

Under NEPA, the significance of historic and prehistoric cultural resources is judged in accordance with the criteria for eligibility to the National Register of Historic Places as defined in 36 CFR 60.4.² If such resources are determined to be significant, and therefore eligible for National Register listing, they are afforded certain protection under the National Historic Preservation Act (16 U.S.C 470F). The Advisory Council on Historic Preservation (ACHP) must be given an opportunity to comment on any federally-funded or permitted undertaking which could adversely affect such resources.

The Section 106 requirements and the specific actions taken to meet these requirements are identified below:

- Identify an APE
- Determine Property's Historic Significance
- Review of Historic Significance
- Develop Memorandum of Agreement if an Adverse Effect Will Occur

III. Agency Consultation

No agency consultation has been initiated.

IV. Timing and Sequence

As the proposed project may require a Corps 404 Permit, the Corps would be required to comply with Section 106 of the National Historic Preservation Act. Section 106 requires the Corps to consult with the Advisory Council on Historic Preservation (via the State Office of Historic Preservation) regarding its effects on historic properties. The Cultural Resources Inventory Report prepared as a technical appendix to the EIR would also serve the reporting requirements for Section 106. The C-APE used for CEQA purposes would also be used as the APE for federal purposes. The APE would be defined in consultation with the Corps (the federal lead agency), which will delimit the extent of the subsequent analysis. ESA would assist the Corps in all its consultation responsibilities under Section 106, including submission of all technical reports and revisions as necessary, drafting of consultation letters between the Corps and SHPO, and development of a draft memorandum of agreement (MOA) if deemed necessary. Section 106 concurrence takes 6 months to 1 year.

V. Permit Checklist

- Cultural Resources Inventory and Section 106 Technical Report
- Tribal consultation
- Determine Property's Historic Significance
- Memorandum of Agreement

² The NHRP criteria are used when complying with NHPA Section 106 projects with federal permits, approvals, funding or oversight.

California Coastal Commission

I. Regulatory Authority

The California Coastal Act of 1976 established the California Coastal Commission (CCC) to “protect, conserve, restore, and enhance environmental and human-based resources of the California coast and ocean for environmentally sustainable and prudent use by current and future generations.” In addition, the CCC and the Bay Conservation and Development Commission (BCDC) are the two management agencies responsible for administering the Federal Coastal Zone Management Act in California. The CCC requires a **Coastal Development Permit (CDP)** for any development occurring in the coastal zone. The coastal zone is delineated by official maps available from the CCC and generally includes areas extending from the shoreline inland for anywhere from 500 yards to five miles. The coastal zone around the Project includes the area along the coast and extends inland surrounding Lake Merced. The tunnel outlet structure, the inlet for the John Muir Drive site tunnel alignment, and the wetland all fall within the coastal zone.

However, the California Coastal Act also authorized the creation of **Local Coastal Programs (LCP)** to help carry out the requirements of the Act. The CCC maintains jurisdiction over development on the immediate shoreline, but the local coastal programs issue coastal development permits for projects that fall within their jurisdiction. If more than one LCP has jurisdiction over a project area, permits must be secured from each one. Daly City, City and County of San Francisco (CCSF), and the County of San Mateo all have established Local Coastal Programs. Since the tunnel and the wetland may fall within the coastal zone, permits may be required under Daly City’s LCP, CCSF’s LCP, and the CCC. A permit may be required from the County of San Mateo’s LCP, depending on the alignment of the tunnel relative to the County’s jurisdiction. The jurisdiction for appeal is west of Skyline Boulevard, therefore if the CDP is rejected, the City could appeal the decision to the Coastal Commission.

For large planning projects, the appropriate permit can be acquired directly from the Coastal Commission through the development of a “**Public Works Plan**” as authorized by §30605 of the Coastal Act. A “Public Works Plan” is reviewed by the CCC in the same way that a LCP is reviewed. The Public Works Plan is certified with the local coastal programs but is issued directly from the CCC. A Public Works Plan allows the program to be approved as a whole and avoids the need for individual permits from separate entities under their respective LCP. This approach may require more preparatory work but would provide a permit for the entire project, would reduce the number of regulatory entities involved, and make the permitting process more efficient.

II. Permitting Requirements

Coastal Development Permit

The Coastal Commission’s primary mission is to plan for and regulate land and water uses in the coastal zone consistent with the policies of the Coastal Act. Chapter 3 of the Coastal Act describes the types of activities that are permitted within the coastal zone and guidelines for managing these activities and protecting the coastline and resources that are protected under the

Coastal Act. The following sections from the Coastal Act (Chapter 3) feature activities that could be applicable to the Vista Grande project, and should be addressed in the project's design alternatives when submitting a Coastal Development Permit.

Development is defined in § 30106 of the Coastal Act to mean:

On land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act, and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan... As used in this section, "structure" includes, but is not limited to, any buildings, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

Applicable sections from Chapter 3 Article 2, Public Access

Section 30211: Development not to interfere with access

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation (Ch 3, Art 2, §30211).

Applicable sections from Chapter 3 Article 4, Marine Environment

Section 30235: Construction altering natural shoreline

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible (Ch 3, Art 4, § 30235).

Section 30236: Water supply and flood control

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat (Ch 3, Art 4, § 30235).

Applicable sections from Chapter 3 Article 5, Land Resources

Section 30240: Environmentally sensitive habitat areas; adjacent developments

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas (Amended by Ch. 285, Stats. 1991).

Applicable sections from Chapter 3, Article 6, Development

Section 30251: Scenic and visual qualities

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting (Ch 3, Art 6, §30251).

Local Coastal Programs

In areas along the coast, the CCC has delegated authority for issuance of a Coastal Zone Permit to local municipalities with approved Local Coastal Plans. The proposed project falls within the jurisdiction of the City and County of San Francisco's Local Coastal Plan. Under Article 3, Section 330.4(e), the City and County of San Francisco (SF) Planning Commission requires a Coastal Zone Permit for any projects that propose to conduct a repair or maintenance to facilities, structures or public works located in an environmentally sensitive habitat area, any sand area within 50 feet of the edge of a coastal waters or streams that include the placement or removal, whether temporary or permanent, of rip-rap, rocks, sand or other beach materials or any other forms of solid materials. Portions of this project that fall within the boundaries of the Golden Gate National Recreation Area are under the purview of the National Park Service, and are therefore exempt from this requirement. Because the Vista Grande project may be located within the City and County of San Francisco, the City of Daly City, and the County of San Mateo, all of which have certified LCPs, a CDP application should be submitted to these local entities.

San Francisco Local Coastal Program and Western Shoreline Plan

The policies of the San Francisco Local Coastal Program are incorporated in the City's Master Plan, as an area plan under the title Western Shoreline Plan. The San Francisco Coastal Zone extends approximately 6 miles along the western shoreline from the Fort Funston cliff area in the south to the Point Lobos recreational area in the north. The south end of the Coastal Zone

includes the Lake Merced area, the Zoo, the Olympic Country Club, and the seashore and bluff area of Fort Funston. The Coastal Zone spans the Ocean Beach shoreline and includes Golden Gate Park west of Fortieth Avenue, the Great Highway corridor and the adjacent residential blocks in the Sunset and Richmond districts. The north end of the seashore includes the Cliff House and Sutro Baths area, Sutro Heights Park, and Point Lobos recreational area.

The Vista Grande Project's location falls within the Fort Funston and Olympic Club area of the San Francisco Western Shoreline Plan. The objectives within those areas that the Project must comply with are described below:

Fort Funston

OBJECTIVE 9 – Conserve the Natural Cliff Environment along Fort Funston

Policy 9.1: Maximize the natural qualities of Fort Funston. Conserve the ecology of entire Fort and develop recreational uses which will have only minimal effect on the natural environment.

Policy 9.2: Permit hanggliding but regulate it so that it does not significantly conflict with other recreational and more passive uses and does not impact the natural quality of the area.

Olympic Country Club

OBJECTIVE 10 – Retain the Open Space Quality of the Olympic Country Club Area

Policy 10.1: If the private golf course use is discontinued, acquire the area for public recreation and open space, if feasible.

Policy 10.2: Maintain the existing public easement along the beach. Encourage the granting of an additional easement by the Olympic Country Club to the National Park Service for public use and maintenance of the sensitive bluff area west of Skyline Boulevard as part of the Golden Gate National Recreation Area.

Policy 10.3: Protect the stability of the westerly bluffs by consolidating the informal trails along the bluff area into a formal trail system which would be clearly marked. Coordinate the lateral trail system along the bluff with the San Mateo trail system south of the San Francisco boundary.

Daly City Local Coastal Program

The 1984 Daly City Coastal Element Local Coastal Program implements the policies and provisions of the Coastal Act at the local level. The Daly City coastal zone consists of all lands within the city limits which are west of Skyline Boulevard, as well as two areas which are east of Skyline Boulevard. The area west of Skyline Boulevard stretches southward from the northern limits of Thornton State Beach to the Mussel Rock headlands. Between these extends about 2.6 miles of beach which is mostly inaccessible because of the steep and high coastal bluffs. The tops of the bluffs are from 300 to over 650 feet in elevation and the slopes are exceedingly steep with a relatively uniform grade from top to bottom of between 75 percent and 100 percent. The areas east of Skyline Boulevard within the city's coastal zone consist of: the area bounded by the Olympic Club on the north, John Daly Boulevard on the south, and Eastgate Drive on the East;

and a portion of Westlake between Lake Merced Boulevard and the Broderick-Terry Duel Site extending 400-500 feet south of the San Francisco line, bounded on the south by a 1000-foot arc around Lake Merced (Daly City 1984). The project area is within the Daly City coastal zone and is therefore subject to the Daly City LCP as well as the Daly City New Development Ordinance specified below:

Daly City New Development Ordinance: “A resource protection zone shall be established between the sea and the first public road paralleling the sea. All development within this zone shall be subject to strict environmental review. (Goal 4 and Section 30253)

Section 30253: Standards for New Development

New Development shall:

- *Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- *Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

San Mateo County Local Coastal Program

Development in the Coastal Zone requires either a Coastal Development Permit or an exemption from Coastal Permit requirements. For a permit to be issued, the development must comply with the policies of the San Mateo County LCP and those ordinances adopted to implement the LCP. The project must also comply with other provisions of the County Ordinance Code, such as zoning, building and health regulations.

Federal Consistency Determination

The Federal Consistency Unit of the California Coastal Commission implements the federal Coastal Zone Management Act (CZMA) of 1972 as it applies to federal activities, development projects, permits and licenses, and support to state and local governments. During the NEPA compliance phase, a Coastal Commission consistency determination may be required for this project because the NPS is a federal agency that would be granting the right-of-way for the project. In the CZMA, Congress created a federal and state partnership for management of coastal resources. The CZMA encourages states to develop coastal management programs, through, among other means, the federal consistency procedures of the CZMA. Upon certification of a state’s coastal management program, a federal agency must conduct its activities (including federal development projects, permits and licenses, and assistance to state and local governments) in a manner consistent with the state’s certified program. The processes established to implement this requirement is called a **consistency determination** for federal activities and development projects and a **consistency certification** for federal permits and licenses and federal support to state and local agencies.

The federal government certified the California Coastal Management Program (CCMP) in 1978. The enforceable policies of that document are Chapter 3 of the California Coastal Act of 1976. All

consistency documents are reviewed for consistency with these policies. The Commission's goal is to use the federal consistency process to provide open communication and coordination with federal agencies and applicants and provide the public with an opportunity to participate in the process. The Commission believes that this process allows it to authorize federal activities in manner that minimizes impacts to coastal resources and is consistent with the CCMP. (CCC, 2008)

There is no fee for a consistency determination submitted by a federal agency for a federal agency activity. There is a fee for consistency certification submitted by an applicant for federal permits. The fee is the same as the Commission requires for coastal development permits.

There is no standard application form for a consistency determination, negative determination, or consistency certification. Any format is permitted, as long as the information requirements are satisfied. There is a "sample" consistency determination, negative determination, or consistency certification formats at <http://www.coastal.ca.gov/fedcd/fedcndx.html> for guidance.

III. Agency Consultation

Daly City met with Coastal Commission staff on September 12, 2007 and May 16, 2008 (prior to development of the Lake Merced alternative) to introduce the Project to the agency and inquire about potential permitting requirements.

IV. Timing and Sequence

The CCC reviews all projects that have a federal action and occur within their jurisdiction. In the case of this project, prior to the issuance of the Corps permit, federal law mandates the CCC must review a project and make a consistency determination. The Coastal Zone Act includes all lands has jurisdiction over lands 100 feet from the shoreline, all areas that are subject to tidal action, and any other area so designated on SF Sectional Maps CZ4, CZ5, and CZ13 of the Zoning Map, including the Olympic Country Club, Lake Merced, and the Pacific Ocean shore extending 3 miles out to sea from the mean high tide.

If a Corps permit is required for work within the Coastal Zone, a consistency determination would be required. This would include a letter addressed to the CCC with the Corps Application included as an attachment.

- Permits for the CCC will be submitted after compliance with the CEQA/NEPA permitting requirements.
- CCC will review documents prepared under CEQA/NEPA requirements.
- If a §404 permit application for the U.S. Army Corps of Engineers (USACE) is required, the CCC will review
- Federal Consistency Certifications review period may be up to **6 months**.
- Commission meetings for project review occur **once per month**, each month in a different location throughout the state. Generally the San Francisco meetings occur in the month of **December** each year.

V. Permit Checklist

Coastal Development Permit

- Proof of applicant's interest in the property
- Assessor's parcel map(s) showing the proposed development site and all adjacent properties within 100 feet of the property boundary
- Stamped envelopes addressed to neighboring property owners and occupants and other interested parties and a list of the same.
- Vicinity map.
- One set of project plan(s), site plan(s), and applicable other plans.
- Copy of any environmental documents (Draft and Final EIS/EIR) if prepared for the project and any comments and responses.
- Verification of all other permits, permissions or approvals applied for or granted by public agencies.
- Copy of geology or soils report (if necessary).
- Local approval of the project.
- Has the Notice of Pending Permit been posted in a conspicuous place?
- Filing fee.

City and County of San Francisco LCP – Western Shoreline Plan

- Compliance with Objective 9 and 10 of Western Shoreline Plan
- Project Review
- Requirements of CDP

Daly City LCP

- Compliance with new development ordinance
- Requirements of CDP

San Mateo County LCP

- Compliance with LCP
- Compliance with provisions of the County Ordinance Code, such as zoning, building and health regulations.
- Requirements of CDP

CCC Federal Consistency Unit

- Compliance with “enforceable policies” contained in Chapter 3 of California Coastal Act
- Consistency Certification may be required
- Project review with unit for consistency with other federal permitting requirements

Public Works Plan Option

- Consult with CCC staff to determine if this streamlined permitting effort should be implemented

Regional Water Quality Control Board – San Francisco

I. Regulatory Authority

The Regional Water Quality Control Board (RWQCB) regulates activities in wetlands and waters of the state under the Porter-Cologne Act. Under Section 401 of the Clean Water Act, the RWQCB has review authority of the USACE Section 404 permits. The State Water Resources Control Board (SWRCB), acting through the nine RWQCBs, must certify that a USACE permit action meets state water quality objectives. The San Francisco Bay RWQCB regulates water quality in the project area.

The RWQCB has a policy of no-net-loss of wetlands in effect and typically requires mitigation for all impacts to wetlands before it will issue a water quality certification. Dredging, filling, or excavation of isolated waters not protected under Section 404 of the Clean Water may constitute a discharge of waste to waters of the State, and prospective dischargers are required to submit a report of waste discharge to the RWQCB and comply with other requirements of Porter-Cologne.

The RWQCB is responsible for the protection of beneficial uses and the water quality of water resources within the San Francisco Bay region. The RWQCB administers the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program and regulates stormwater in the San Francisco Bay region. The City of Daly City is a permittee under the NPDES Municipal Regional Stormwater Permit Order No. R2-2009-0074. The RWQCB also issues 401 certifications for projects that require Section 404 permit from USACE.

Clean Water Act

Under the Clean Water Act (CWA) of 1977, the U.S. Environmental Protection Agency (EPA) seeks to restore and maintain the chemical, physical, and biological integrity in the nation's waters. The statute employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The CWA authorizes the EPA to implement water quality regulations. The NPDES permit program under section 402(p) of the CWA controls water pollution by regulating stormwater discharges into the waters of the U.S. California has an approved state NPDES program. The EPA has delegated authority for water permitting to SWRCB.

Section 401 of the CWA requires every applicant for a federal permit or license for an activity that may result in a discharge of pollutants to the waters of the U.S. (including permits under section 404 of the CWA). The purpose of the permit application is to obtain certification that the proposed activity will comply with the state water quality standards. There is an existing RWQCB water quality permit for the wastewater treatment plant's effluent, which passes through

the canal and outfall and there is a county-wide water quality permit for the stormwater that enters the canal through the outfall

II. Permitting Requirements

The RWQCB has jurisdiction over waters of the U.S. and waters of the state which may not be subject to Corps jurisdiction. Before the Corps can issue the 404 permit, the RWQCB must certify that the permit also meets state water quality objectives under Section 401 of the Clean Water Act. An application for 401 Water Quality Certification would be required for submittal to RWQCB according to the RWQCB guidelines. The application would need to include a copy of all materials submitted to the Corps and CDFG, as is required. A copy of the CEQA document would also be submitted.

III. Agency Consultation

ESA contacted Habte Kifle at the San Francisco Bay RWQCB by phone on October 9, 2007. RWQCB confirmed that a Clean Water Act 401 permit (required for any kind of fill or construction within waters of the US) would be required for this project. Additional concerns were raised regarding apparent high levels of coliforms (and lesser levels of e-coli) in Daly City stormwater. It has not been determined where these pollutants come from, but RWQCB staff requested that as Daly City develops their own system they would examine opportunities to treat or otherwise reduce these pollutants in the stormwater stream. RWQCB recommended the project team review the draft Municipal Regional Permit for stormwater. Consultation has continued and the Lake Merced alternative has been discussed with the RWQCB.

IV. Timing and Sequence

- CEQA permit review
- 60 days after application for Clean Water Act §401 water quality certification is deemed complete; up to one year of additional time may be requested
- Contact RWQCB staff before starting CEQA documentation
- RWQCB representative will notify within 30 days of receipt of application form whether application is complete

V. Permit Checklist

- Section 401 application form
- Evidence of CEQA compliance (Notice of Determination)
- Copy of Corps IP application or PCN
- Revised wetland delineation and maps
- Cultural resources information (archaeological report)
- Mitigation and Monitoring Plan (MMP)
- Alternatives Analysis Report

State Lands Commission

I. Regulatory Authority

The State Lands Commission (SLC) has jurisdiction and management control over those public lands of the State received by the State upon its admission to the United States in 1850 (“sovereign lands”) (California Public Resources Code-Division 6 Public Lands). Generally these sovereign lands include all ungranted tidelands and submerged lands, beds of navigable rivers, streams, lakes, bays, estuaries, inlets and straits. The SLC manages these sovereign lands for the benefit of all the people of the State, subject to the Public Trust for water related commerce, navigation, fisheries, recreation, open space and other recognized Public Trust uses. In addition, the State manages lands received after Statehood including swamp and overflowed lands and school lands. The Commission’s Land Management Division in Sacramento administers the surface leasing of these lands, sand and gravel extraction from these lands, and dredging of disposal of dredged material on these lands. The Commission also manages the development of all mineral resources contained on such lands.

The issuance of any lease, permit or other entitlement for use of State lands by the SLC requires review for compliance with the California Environmental Quality Act (CEQA). No proposed project will be approved until the requirements of CEQA have been met. Additionally, if the application involves lands found to contain “Significant Environmental Values” within the meaning of the PRC Section 6370, consistency of the proposed use with the identified values must also be determined through the CEQA review process. Pursuant to its regulations the SLC may not issue a lease for use of “Significant Lands” if such use is detrimental to the identified values.

II. Permitting Requirements

The National Park Service (NPS) is authorized by 16 U.S.C. §79 to permit the construction of certain public utilities, including flumes, tunnels, and other water conduits (including sewer), across Golden Gate National Recreation Area (GGNRA) lands in accordance with NPS regulations. NPS regulations at 36 C.F.R. §5.7 implement this authority by prohibiting the construction of utilities and other structures in park areas except in accordance with the provisions of a valid permit or agreement. The type of NPS permit required for the proposed project will depend on whether the proposed storm water tunnel and beach outfall on GGNRA lands are consistent with the terms of the municipal easement for the existing Vista Grande storm water outfall (Easement).

If these components of the proposed project are consistent with Daly City’s Easement, project implementation would be regulated pursuant to a NPS Special Use Permit (SUP) (Form 10-114) and Director’s Order 53 (See, 36 C.F.R. §5). An SUP application is required regardless of whether the City is seeking to renew or amend an existing authorization, or request a new authorization. Following a pre-application meeting with a representative of the GGNRA Superintendent and using available information, materials necessary to complete the application would be prepared.

General Lease Right-of-Way

A General Lease Right-of-Way is required for any project within the California State Lands Commission's jurisdiction. Any work below the ordinary high-water mark in areas that are subject to tidal action (such as the tunnel outlet) would be within their jurisdiction.

Depending on the placement of the tunnel outlet structure and the final design of the Vista Grande Wetland, a State Lands Commission General Lease – Right-of-Way may be required for the Project. Further investigation is necessary to make this determination.

The lease agreement between the NPS and the State Lands Commission pertains to land at Fort Funston and lands from mean high water line to 1000 feet off shore. Any project would need to comply with the terms of this lease and if the project were outside the current lease requirements, a renegotiation with the State Lands Commission (the lessor) would be required. The State Lands Commission Lease:

- Requires CEQA review;
- Does not permit or promote development on property;
- Cannot issue a permanent easement; only a 10-year right of way;
- Allows for a 10 year extension; and
- Expires in 2037.

III. Agency Consultation

ESA contacted Mary Hays of the State Lands Commission on October 10, 2007, prior to development of the Lake Merced alternative. It was noted that the State Lands Commission would need to be involved if the new outfall structure alternative is anywhere below the mean high-tide mark. She said that there would need to be a very compelling reason to put a new outfall structure in at Thornton State Beach and that the Commission is currently not very favorable to new developments along the shoreline and it is something that they come up against regularly. She wanted to know if the alternative for the construction of the new outfall structure would mean that the old outfall structure would no longer be used because depending on its condition, they may recommend it's removal if it is no longer to be used.

Mary is in the Land Management (leasing) division, but the Environmental Planning division of the Commission should also be consulted with. She will be commenting on the Environmental Characterization document and will forward the document on to the Environmental Planning Division for their feedback as well. Once the preferred alternative is selected and the Environmental Document was complete that the next step would be to submit an application to the state lands commission for the permitting of the right-of-way. The State Lands Commission would like to meet with the project team after the preliminary stages of the project are complete.

IV. Timing and Sequence

- State Lands Commission Lease of state lands application will be terminated if an application becomes inactive for a period of 6 months.

- Fees for ROW or Public Agency Lease from SLC may be \$2,500-\$3,000
- Requires CEQA documentation
- The processing time for a State Lands Commission General Lease – Right-of-Way ranges from one to three years.

V. Permit Checklist

- Current vesting document (deed) for property lying landwards of and adjacent to the State lands you seek to use
- Evidence of right to use the property
- Detailed plan or plot of proposed lease areas and existing and proposed structures showing their locations with respect to property lines, height and low water with reference to the datum of water line elevation and their dimensions.
- Vicinity map (8½ x 11” with scale) showing the general area and project site in relation to the shoreline, roadways and other landmarks
- Legal description
- Other governmental jurisdiction
- USACE public notice, notice number, or letter of approval for project; submit number assigned to project from SFBCDC, CCC and copies of existing approvals.
- Copy of local approvals
- Existing conditions
- Construction dates and aerial or ground photos
- Describe public use of water body and adjacent uplands, frequency of use, existing public access to water body across Project site
- Maps and/or aerial or ground photographs which delineate existing vegetation at the proposed Project site and along the shore of the water body and within ½ mile radius of Project site
- Identify type and location of any known habitat of rare, threatened or endangered species of plant or animal within a one mile radius of the proposed project site.
- Project description including project development plan with scale drawing and topographic features
- Construction methods and equipments to be used and anticipated time frame for construction activities
- Describe special measures proposed to control the quality and quantity of urban and other runoff from surrounding areas
- Describe the stormwater management system. Does the system provide a bypass or overflow systems so that the peak discharge from a 10-year, 14-hour storm will be safely conveyed to an erosion and scour-protected storm water outfall
- Describe amount and description of method of dredging necessary to complete construction and identification and estimate of amounts and persistence of contaminants with may be released from sediments during dredging and during construction and operation and maintenance

- Project Environmental Data
 - Assessment of environmental impacts

California Department of Fish and Game

I. Regulatory Authority

Projects that will temporarily or permanently obstruct the flow or alter the bed, channel, or bank of a river or stream must receive a Lake and Streambed Alteration Agreement (SAA) from CDFG.

II. Permitting Requirements

Section 1602 Lake/Streambed Alteration Agreement

An application for a Section 1602 Lake/Streambed Alteration Agreement would be prepared for any impacts to any jurisdictional stream. This application would also disclose impacts to state-protected species or habitats, minimization and mitigation measures for impacts and provide a copy of the CEQA document.

III. Agency Consultation

No agency consultation has taken place.

III. Timing and Sequence

- Pre-consultation
- Submit formal notification package
- CDFG determines whether Agreement is required within 60 days after receiving notification package
- CDFG requests additional information
- Applicant provides additional information
- Application deemed complete
- SAA issued

III. Permit Checklist

- Lake and Streambed Alteration Agreement application form with additional information
- Application fee
- Proof of CDFG environmental filing fee with the State Clearinghouse (for CEQA review)
- CEQA Approval (Notice of Determination)

SECTION 3

Environmental Constraints and Opportunities

The following section is a preliminary examination of some of the environmental impacts that would be evaluated further under California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). Project construction would have temporary impacts to the surrounding area. This section presents some of these impacts and the potential mitigation measures to reduce impacts and develop opportunities for beneficial impacts such as habitat restoration. An impact analysis would be developed as part of the environmental documentation required for the project. The public would have several opportunities to weigh in on the topics to be analyzed and this process is described below.

Public Involvement for NEPA/CEQA

Public participation is an essential part of the CEQA and NEPA process. Procedures for public involvement include making environmental information available to the public and soliciting public comments. This process also applies to local, state and federal public agencies, whose comments are solicited on the project as it relates to the agencies activities. Because the final document will be a joint EIR/EIS to satisfy requirements of both CEQA and NEPA, the public involvement and review process will be held simultaneously. CEQA and NEPA do not require formal hearings at any stage of the environmental review process, however public hearings are encouraged. The public review period for draft Environmental Impact Reports (EIRs) and Environmental Impact Statements (EISs) must be for no less than 30 days following the date of notice, or 45 days where the draft EIRs are submitted to the State Clearinghouse. The lead agency must seek and respond to public comments: 1) sharing expertise; 2) disclosing agency analysis; 3) checking for accuracy; 4) detecting omissions; 5) discovering public concerns; and 6) soliciting counterproposals (CEQA Guidelines, section 15200). Under CEQA public notice and review is required for Draft EIRs but not Final EIRs. However, under NEPA, Federal Register public notice and public review is required for Draft and Final EISs.

The following section outlines the opportunities for public engagement in the environmental review process:

I. Scoping

The lead agency will prepare a Notice of Preparation (NOP), as required by CEQA, and a Notice of Intent (NOI), as required by NEPA. This joint document informs the public of the description of the project, location, probable environmental effects, and alternatives (required for NEPA) as well as the time frame for response and agency contacts.

Public Involvement in Scoping Process: After the NOI/NOP is published, the public and agencies are invited to review and comment on the scope of the project within a **30-day period**.

II. Draft EIS/EIR Preparation

Following the receipt of scoping comments, the lead agency will prepare the EIS/EIR, which describes the project fully and evaluates the potential environmental impacts of the projects and proposes actions to lessen the impacts. Following completion of the document, the draft EIS/EIR is published for public and agency review.

Public Involvement in Draft EIS/EIR Review: A Notice of Availability (NOA) will be filed with the State Clearinghouse and in the Federal Register, with formal notification to the Environmental Protection Agency (EPA) to announce the availability of the draft EIS/EIR for public review within the **45-day review period**.

III. Final EIS/EIR

The final EIS/EIR highlights the responses to comments and makes corrections or clarifications within the document. NEPA requires the federal lead agency to file a second NOA with the EPA with notification in the Federal Register and distribute the final EIS/EIR to interested agencies, groups and individuals.

Public Involvement in Final EIS/EIR Review: The final EIS/EIR is available for public review for another **30-day review period**.

Environmental Impacts

This section elaborates on some of the resources that would be impacted by the construction and operation of this project. The resources described here and the mitigation measures proposed represent some of the primary concerns of the resource agencies. However, this is not a comprehensive list; all resource area impacts and mitigation measures would be fully analyzed during the environmental review process.

I. Geology and Soils

The geological resources at Fort Funston consist of the Merced Formation which is Pliocene to Pleistocene in age and is generally a mix of sandstone, siltstone, and clay deposited in a shallow marine environment. The rock at the outfall structure is mainly medium to coarse grained, poorly sorted, moderately to thinly-bedded sandstone with layers of finer-grained silt and clay. The cliff

weathers easily, especially during heavy winter rains. Because the rock has high permeability (being mainly sandy), infiltration is high, but as soon as the capacity to store water has been exceeded, the excess runoff easily carries the rock away with it creating the “permanent rill” (gully) erosional features. The most common way these form is by water running off the edge of the cliff as sheet flow from impervious surfaces such as pavement or highly compacted soil (park trails, dirt paths etc...) above this feature. The estimated bluff retreat rate for the coastal cliffs of the Merced formation is one foot/year based on retreat estimates from the past fifty years (Griggs, 1985). Actual retreat rates will depend mostly on the frequency of intense rainfall events, which are highly episodic and tend to be concentrated during El Nino years.

Initial site reconnaissance indicates bluff slopes have been over-steepened and are more susceptible to slope failure and wave undercutting.

Geology and Soils Mitigation Measures

- Provide NPS with peer-reviewed coastal engineering or geologic studies, drawings and/or photos relevant to the likely impacts and possible alternative locations for the proposed outfall structure.
- Provide NPS with calculation of quantity and composition of geologic material that would be excavated as well as peer-reviewed geologic studies of this area.
- NPS requires protection of paleontological and archeological resources during construction projects; provide a monitoring and protection plan for these.

II. Traffic and Circulation

Traffic and circulation impacts would result from the increase in vehicles due to construction worker transportation; materials and delivery vehicles; and truck trips removing excavated material. **Table 1** presents an estimate of the number of truck trips for the excavated material removal only and does not include worker trips, or material delivery trips. The numbers generated from the tunnel and shaft excavation would be combined with one of the alternatives in order to evaluate the total truck trips per project and to see the difference between the impact of each alternative.

**TABLE 1
MUCK EXCAVATION QUANTITIES**

Location of Excavation (Jurisdiction)	Material	Quantity Excavated (cubic yards)	Estimated Truck Trips ^a
Fort Funston Shaft Construction Area			
Tunnel from shaft to beach (NPS/GGNRA)	sand	▪ 16,000	1,066
Shaft (NPS/GGNRA)	sand	▪ 11,000-27,000	To be used on site at Fort Funston
Alternative 5B – Portal to shaft	soil/sand	▪ 40,000	2,666
Alternative 6B – Portal to shaft	soil/sand	▪ 29,000	1,933
Alternative 7 – Portal to shaft	soil/sand	▪ 16,000	1,066

^a Truck trips are one-way and based on a 15 cubic yard (cy) truck capacity

SOURCE: Jacobs Associates

Traffic and Circulation Mitigation Measures

Implement a traffic control plan with strategies to maintain safe and efficient traffic flow during the construction period.

III. Noise and Vibration

The following general activities are anticipated to generate the most noise for the proposed project:

- Excavation and lining of the shaft,
- Tunnel excavation and lining,
- Muck disposal near the shaft, and
- General construction activities at the surface.

The type of geologic material encountered during tunneling or boring would have different vibration impacts. Hard rock formations encountered during shaft construction may also require the use of impact or vibratory equipment such as hoe-rams, jackhammers, or rock drills. These types of equipment can produce continuous groundborne noise and vibrations at levels that could damage nearby buildings and would be discernible by human receptors. Groundborne noise and vibration from impact or vibratory equipment are not expected during the tunnel boring activities because rocks encountered during the tunnel boring and excavation process would be broken inside the tunnel. Vibrations that are long term or continuous in nature (shaft construction, tunnel boring, and muck handling) will be evaluated based on the potential to impact sensitive receptors.

Human response to noise varies from individual to individual and depends on the ambient environment in which the noise is perceived. The same noise that would be highly intrusive to a sleeping person or in a quiet park might be barely perceptible at an athletic event or in the middle of a freeway at rush hour. Effects of noise at various levels can include interference with sleep, concentration, and communication; physiological and psychological stress; and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others.

People in residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, natural areas, parks, and outdoor recreation areas are generally more sensitive to noise than are people at commercial and industrial establishments. Consequently, the noise standards for these sensitive land uses are more stringent than those for less sensitive uses. In general, residences and schools are among the land uses considered to be the most sensitive to noise.

Active parks and playgrounds are not as sensitive to noise as residences, schools, hospitals, or convalescent care facilities, because the levels of background noise at parks with active recreational uses and school playgrounds are elevated. However, natural recreation areas require a degree of quiet for passive recreational uses. Open space or outdoor recreation areas that are used for passive recreational activities such as hiking and picnicking are considered noise-sensitive uses if the noise environment is considered to contribute to the recreational experience. **Table 2** identifies sensitive receptors in the vicinity of the proposed project.

**TABLE 2
SENSITIVE RECEPTORS IN THE PROJECT VICINITY**

Project Site (Jurisdiction)	Noise Environment	Sensitive Receptors Located Adjacent to or Near Project Area	Minimum Distance to Receptor^a (feet)
Fort Funston Shaft Construction Area			
National Park Service, GGNRA	Quiet/ Natural Area	▪ Outdoor Recreation/Hanglider launch and landing area	975
National Park Service, GGNRA	Quiet/ Natural Area	▪ Outdoor Recreation/Horse Trail	0
National Park Service, GGNRA	Quiet/ Natural Area	▪ Outdoor Recreation/Sunset Trail	600
National Park Service, GGNRA	Quiet/ Natural Area	▪ Education Facility/Environmental Science Center (SFUSD)	875
National Park Service, GGNRA	Quiet/ Natural Area	▪ Historic Structure/Battery Davis	930
National Park Service, GGNRA	Quiet/ Natural Area	▪ Historic Structure/Nike Missile site	0
Private	Quiet/ Suburban	▪ Outdoor Recreation/Olympic Club Golf Course	1200
Daly City	Quiet/ Suburban	▪ Residences/Northgate Avenue	1 mile

Noise and Vibration Mitigation Measures

Daytime noise from equipment at the shaft area could feasibly be reduced by: 1) using a sound barrier positioned near the edge of the shaft to control noise from cranes, conveyors, and other equipment servicing the shaft, and 2) specifying allowable ventilation system noise levels at the design phase. Noise from nighttime construction activities at the shaft area could be controlled administratively to avoid excessive vehicle noise, idling engine noise, and loud conversation during the night and by the placement of sound barriers around the work vehicle parking area.

- Placement of temporary noise barrier(s) as close to noise-generating equipment as feasible while continuing to ensure safe operation;
- Placement of acoustical blankets around noise-generating equipment;
- Use of acoustical tents around equipment and working areas in the shaft area; and
- Use of rubber-on-rubber conveyor belts to transport muck to the muck disposal area in the shaft area

IV. Aesthetics

The construction activities will be taking place in a highly visible area, because the main staging area for the shaft would be at the public parking lot of Fort Funston, which is part of Golden Gate National Recreation Area. A full analysis of the impacts to visual resources or aesthetics would examine the temporary construction impacts due to the presence of the staging area, construction equipment as well as the permanent operational changes, such as the placement of a new outfall

at Ocean beach. Some of the construction-level impacts would include visual resources disrupted by: 1) construction activities, including the presence of construction workers and their vehicles; 2) the temporary disruption of the existing groundcover; and 3) nighttime lighting near the tunnel entrance during tunneling activities.

If construction activities occur at night, the construction site would be illuminated to ensure the safety of the construction site for workers supporting tunneling activities. Nighttime activities requiring lighting would be limited to support for the operation of the tunneling equipment during the construction period. Lights would be needed at the shaft area to allow operation of the equipment to move muck to the temporary muck bins, to allow for safe movement of workers, and to illuminate parking and office areas.

Aesthetics Mitigation Measures

Short-term Visual Impacts During Construction

- The noise barrier used at the shaft will serve as visual screening of the construction site at Fort Funston.

Nighttime Lighting

- A lighting plan will be prepared by a qualified lighting professional.
- The lighting plan will indicate required lighting sources during nighttime operations and specify shielding of light sources to minimize light spillover at the shaft area; in addition, the plan will specify that lighting be shielded and directed to work areas only, and that light spillover will be minimized to the extent feasible. It will also provide for monitoring of lighting sources to ensure that feasible adjustments are made as necessary to provide maximum shielding during all phases of construction.

Operational Impacts to Visual Resources

- Use alternative materials for the outfall that are compatible with the scenic resources at the beach and blend in with the natural environment.

V. Cultural Resources

Excavation of the tunnel and shaft on lands that are leased by the National Park Service would require an archaeological and paleontological resource monitoring and protection plan for resources that may be encountered during construction.

Cultural Resources Mitigation Measures

- The National Park Service has developed a Programmatic Agreement in consultation with the California State Historic Preservation Officer, the Advisory Council on Historic Preservation, culturally associated American Indian tribes, and the public. This agreement stipulates a process for the treatment of historic properties, including identification, evaluation, and, if necessary, mitigation of adverse effects including: documentation, interpretation, materials salvage, and National Register re-evaluation.

- Incorporate mitigation measures into site-specific planning and design including protecting archeological deposits from disturbance
- Protect known human burials from disturbance, and prepare emergency discovery plans to deal with any unanticipated discoveries
- Mitigate impacts to archeological resources through data recovery excavations and construction monitoring as specified in the Programmatic Agreement.
- Undertake all treatments to historic structures or within cultural landscapes in keeping with the Secretary of Interior's Standards for the Treatment of Historic Properties

VI. Biological Resources

Special-Status Species

Construction of the shaft will occur on disturbed area next to the parking lot at Fort Funston. Sensitive species within the proximity of the construction staging area include the San Francisco Spineflower (*Chorizanthe cuspidata*) and bank swallow (*Riparia riparia*). San Francisco spineflower, a California Native Plant Society List 1B species³, is found in a 34-acre enclosure approximately 1,800 feet from the staging area. The National Park Service has been engaged in its protection at the Fort Funston site and closed off this area to the public.

A colony of bank swallows (*Riparia riparia*), a state-listed threatened species and federally-listed species of concern located at Fort Funston is the largest nesting colony in the San Francisco Bay Area: more than 700 burrows (approximately 40 to 50 percent of which are occupied) were present in 1997 (NPS, 1999). The Fort Funston bank swallow colony is one of only two or three remaining on the California coast. The colony is located in the bluffs at the north end of Fort Funston. Any construction south of the Hang Glider Observation Deck is not likely to have an impact on the swallows, which are approximately 3,800 feet from the proposed staging area.

It will be necessary to survey the cliffs at the outfall site for evidence of bank swallow nesting during May and June when the swallows would be present. A survey of wintering ducks, grebes, cormorants and loons should be included in the environmental assessment for the outfall structure construction.

California red-legged frog (CRLF) has not been observed at Lake Merced since a San Francisco University biologist reported a juvenile red-legged frog at Impound Lake in 2000⁴⁻⁵. Prior to that time the species had not been observed since the 1970's. Protocol-level surveys conducted in 2000 did not find any further presence of CRLF, and concluded that the species was extirpated

³ List 1B = Plants rare, threatened, or endangered in California and elsewhere.

⁴ EDAW, Inc./Talavera and Richardson. 2004. Natural Resource Baseline Study Final Report for Lake Merced. March, 2004.

⁵ CDFG, 2003. List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database. September 2003. Available online at <http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf>. Accessed April, 2009.

because of a large population of predacious bullfrogs and large-mouthed bass⁶. However, the recorded observation from 2000 would make this finding debatable with the USFWS. Recent increases in lake levels would further favor populations of bullfrogs and bass as this would prevent areas of the lake from exhibiting seasonal hydrology that favors CRLF over bullfrogs and bass. Although it is not impossible for CRLF to survive in perennial waterbodies with dominant predacious species, it is highly unlikely that they could. Updated protocol-level surveys for CRLF would be recommended to document the species absence for any future work within Impound Lake. Without these studies, it is likely that the USFWS and/or the Corps would assume presence of the species; impacts to Impound Lake would then require a Section 7 consultation under the Endangered Species Act (ESA). If species presence is assumed in Impound Lake, any designed mitigation would need to target CRLF habitat as a stated objective. However, even negative results from protocol surveys wouldn't necessarily persuade USFWS that the lake was not potential habitat. Some level of mitigation may still be required based on the recorded observation of CRLF in 2000, and the persistent suitability of aquatic and upland habitat elements. Required mitigation ratios for impacted wetlands that also are endangered species habitat may approach as high as 3-to-1; ratios in wetlands where endangered species are assumed but not confirmed can be lower.

The biodiversity of Fort Funston is threatened by a blanket of the invasive species ice plant (*Carpobrotus edulis*). The Vista Grande project proposes to develop a native habitat restoration plan for the upper portion of Fort Funston that is impacted by construction and staging as well as adjacent areas. This restoration plan would be developed in consultation with GGNRA and Fort Funston natural resource management staff and would include invasive plant removal and native plant propagation and planting. Fort Funston houses a native plant nursery on site, which could serve as the propagation site for the native plants.

Wetlands

Since the first Bush administration, the Corps has implemented a no-net-loss policy for impacts to wetlands. Impacts to wetlands can result from the direct fill of wetlands, or from intentionally or unintentionally altering the hydrology resulting in the destruction of the wetland. As such, the Corps would require a minimum of 1-to-1 wetland creation for those wetlands lost due to inundation from increased lake levels or other construction activities and potentially for future maintenance activities. At its most extreme, the Corps could assert that all existing wetlands within Impound Lake would be lost due to changes resulting from the proposed project. Under this scenario, the project proponent may be required to prepare a wetland mitigation plan for the creation of in-kind wetlands elsewhere within the region to fully compensate for the loss of wetlands due to new construction. One strategy to lower required mitigation ratios is to satisfy mitigation requirements prior to initiating construction. In this way, there are no expected temporal losses of wetland habitat or functions resulting from the lag in wetland destruction during project construction and wetland creation during mitigation implementation.

⁶ EIP Associates. 2006. Significant Natural Resources Areas Management Plan, Final Draft. Prepared for the San Francisco Recreation and Park Department. February, 2006.

In July 2010 a wetland assessment was completed for Lake Merced's Impound Lake in San Francisco, CA. The purpose of this study was to determine a preliminary acreage of wetlands and other waters as defined by the Clean Water Act that could be affected by the Project. A formal wetland delineation was not conducted onsite and further investigation will be warranted prior to submittal of these results to any regulatory agency. Potentially jurisdictional waters (wetlands and other waters) observed at the survey location total approximately 19.57 acres. The wetland area covers approximately 9.85 acres and is a mix of palustrine aquatic bed (PAB), palustrine emergent (PEM), and palustrine scrub-shrub (PSS) Cowardin wetland types.⁷ Other waters total approximately 9.72 acres and consist of open water.

Biological Resources Mitigation Measures

- Avoid construction activities within the vicinity of sensitive species
- Conduct bird surveys for bank swallows during May and June
- Conduct winter survey for ducks, grebes, cormorants and loons at outfall structure
- Avoid tree and native vegetation removal where practicable
- Develop a restoration plan that restores areas of invasive species with native dune, scrub and grass species
- Required mitigation ratios for impacted wetlands that also are endangered species habitat may approach as high as 3-to-1; ratios in wetlands where endangered species are assumed but not confirmed can be lower.

⁷ Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79-31. USDI Fish and Wildlife Service, Washington, DC. 103 pp.